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VOL. 24 NO. 35 August 30, 1974

Cooperative Economic Insect Report

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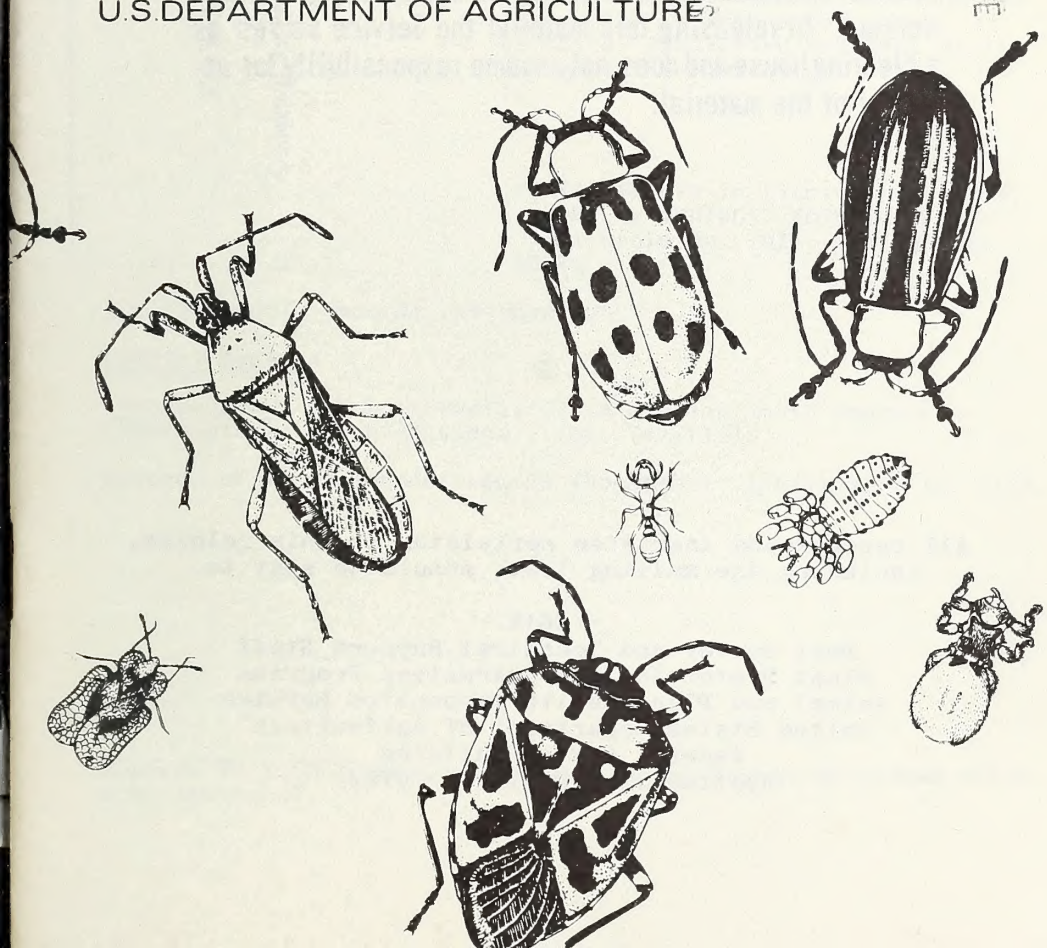

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE PROGRAMS
PEST SURVEY AND TECHNICAL SUPPORT STAFF

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Service serves as a clearing house and does not assume responsibility for accuracy of the material.

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Volume 24 August 30, 1974 Number 35

COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

CORN EARWORM moth flight and egg laying continued to increase in Maryland, egg laying expected to increase in Eastern Shore soybeans; at or above economic levels in soybeans in southern South Carolina. GREENBUG infestations in sorghum decreased due to parasitism, predation, and other factors in some areas of Texas, Oklahoma, and Kansas. (pp. 689, 690).

EUROPEAN CORN BORER moth activity heavy in Wisconsin and light in Maryland, moth emergence about complete in Minnesota (p. 690).

THREECORNERED ALFALFA HOPPER and larvae of 3 NOCTUID MOTHS ranged moderate to heavy in soybeans in east-central and southeast Oklahoma. (pp. 694-695).

BOLLWORM oviposition increased in areas of Texas, Oklahoma, Louisiana, and Mississippi cotton; damaged squares increased in some areas. BOLL WEEVIL still problem in some areas, some increase in punctured squares noted. BANDEDWING WHITEFLY still problem in Alabama cotton, increased in Mississippi and Arkansas. (pp. 695-697, 698).

Detection

New State records include a CONIOPTERYGID in Virginia (p. 703), a SAWFLY in New Hampshire (p. 700), a SPHINGID MOTH in Hawaii (p. 699), TULIPTREE APHID in California (p. 701), and WESTERN WHEAT APHID in Oklahoma (p. 692).

For new county records see page 704.

Special Reports

Ischyroceraea Kiaer, A Sawfly Genus New for North America (Hymenoptera: Tenthredinidae). (pp. 707-710).

Records of a Few Vermont Aphids (Homoptera: Aphididae). (p. 711).

Reports in this issue are for week ending August 23 unless otherwise indicated.

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WEATHER OF THE WEEK ENDING AUGUST 26

Reprinted from Weekly Weather and Crop Bulletin supplied by Environmental Data Service, NOAA.

HIGHLIGHTS: Good rains occurred in scattered sections of the Nation. Warm, moist gulf air triggered considerable precipitation from northwestern Texas northward to eastern Iowa. Lubbock and Amarillo, Texas, reported 3.91 inches of precipitation. Except for eastern Iowa and nearly all of Missouri, the Corn Belt received little or no precipitation. Temperatures were near normal for late summer in most areas of the Nation last week.

PRECIPITATION: Showers and thundershowers were reported in many areas. Rains averaging 1 to 2 inches were recorded from Texas northeastward to south-central Wisconsin. In the West, Montana received some much needed precipitation, with Great Falls reporting 2 inches for the week. Elsewhere, precipitation fell along the extreme eastern seaboard from Pennsylvania southward through Florida with stations reporting from 0.50 inch to 2 inches during the week. Except for northern Maine, only light precipitation fell over New England. Some widespread areas in the Midwest, Northeast, and Deep South reported little or no precipitation for the week. The Far West remained dry except for a few light showers in the extreme Pacific Northwest. In the Texas Panhandle, Amarillo has recorded 7.19 inches of rain so far this month, making it the wettest August on record. The old record was 6.76 inches set in 1906. Monday, locally heavy rains soaked the Middle Atlantic States. Clarksville, Maryland, got 2.20 inches and 1.33 inches of rain fell in Washington, D.C., causing some flooding. Early Tuesday, a Low centered over northwestern South Dakota triggered thundershowers and showers across Montana and eastern North Dakota. Wednesday, heavy thunderstorms swept across the Southland and in a band from west Texas into Wisconsin. Weather of the week continued on page 712.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

BEET LEAFHOPPER (Circulifer tenellus) - UTAH - Generally light in northern and central areas, curly top light in tomatoes in Davis and Salt Lake Counties. (Knowlton, Burningham).

CORN EARWORM (Heliothis zea) - MARYLAND - Moth flight and egg laying continued to increase in all areas. Field corn infestations ranged 20-60 percent on lower Eastern Shore. However, damage levels peaked due to maturing ears. Damage well below that expected due to poorly filled ears even though infestations moderate to heavy. Most ears failed to fill during July drought period. Egg laying expected to increase significantly in 80,000+ acres of Eastern Shore soybeans within next 14 days. (U. Md., Ent. Dept.). VIRGINIA - Larvae appeared in Isle of Wight County soybeans. Sample of 28 fields (666.5 acres) showed average of 0.7 larva per 30 row feet. Larvae young, not yet at level in any field to require treatment. Situation could change rapidly next few weeks, but populations in soybeans expected to be light this season. None found in 30 fields (670 acres) checked in Westmoreland County. Moths increased significantly at Holland, 165 trapped nights of August 17-19. (Eaton). KENTUCKY - Larval populations very light in most areas. (Barnett).

SOUTH CAROLINA - Sampling indicated H. zea larvae (second, third, and fourth instars) appeared in soybeans in Duplin, Sampson, Cumberland, and Harnett Counties. First and second instars appeared in Wilson, Edgecombe, Martin, and Washington Counties. Of 15 fields examined in southern counties which were blooming or just past peak bloom, about 50 percent at or above economic level (one larva per row foot). Of 10 fields checked in northern counties, none at economic injury level. Adults noted in all fields checked. (Hunt). GEORGIA - Ranged light to moderate across peanut belt. (French). ALABAMA - Very light in soybeans with only occasional larva feeding on pods in all fields examined in Geneva, Escambia, and Mobile Counties. (Henderson et al.). One small larva per 2 feet of row in 50-acre peanut field in Geneva County. One or more large larvae per foot of row on several hundred acres of peanuts in Russell County farm and mixed with other leaf feeders. (Bond et al.).

WISCONSIN - Occasional H. zea moth reported from some sites. Major flight not likely to occur for another 14-21 days. By that time most sweet corn will be harvested. Fifth-instar larvae reported in Walworth County sweet corn; averaged about one per 100 plants. (Wis. Ins. Sur.). NEW YORK - First moths of season caught in Ontario County light trap August 20. (Davis).

CORN LEAF APHID (Rhopalosiphum maidis) - MAINE - Populations increased significantly in untreated or improperly treated cornfields. No damage evident to date in well maintained stands. (Gall). NEW YORK - Especially severe in style pack variety corn in Ontario County. (Davis). ILLINOIS - Light to moderate in 90 percent of cornfields in northwest and northeast districts. In moderately infested field, 50 percent of tassels covered, with additional 1-2 percent of plants totally covered with aphids. (Ill. Ins. Rpt.). WISCONSIN - Some treatment made in Columbia County corn. Populations decreased greatly in most older fields, but some increase occurred in younger fields. Colonies of 200-300 per plant noted in some Rock and Marquette County cornfields in whorl stage. (Wis. Ins. Sur.). IOWA - Heavy on 20 acres of grain sorghum

in Palo Alto County. (DeWitt). KANSAS - Moderate to heavy in 25 percent of early bloom sorghum heads in one Marion County field. Trace to none noted in sorghum heads in other fields surveyed in this and other counties in this district and in east-central, northeast, and north-central districts. (Bell).

GREENBUG (Schizaphis graminum) - TEXAS - Light to moderate in Haskell County sorghum fields. Declined to noneconomic levels in grain sorghum in San Angelo area counties. Only some fields in High Plains counties near Lubbock and Amarillo still treated. Braconid wasps reduced infestations to noneconomic levels. Light populations of greenbugs prevail on grain sorghum throughout Trans-Pecos area. Heavy parasitism reduced greenbug populations significantly past 10 days. Some colonies noted in Pecos County with counts ranging 2-5 aphids per colony. (Boring et al.). OKLAHOMA - Decreased in Texas County sorghum due to parasitism by Lysiphlebus testaceipes (a braconid wasp). S. graminum ranged 0-30 per plant in Tulsa County and up to 400 per plant in Okmulgee County but decreased due to L. testaceipes and predation by Hippodamia convergens (convergent lady beetle). S. graminum ranged light to moderate in Washita and Caddo Counties. (Okla. Coop. Sur.).

KANSAS - Greenbug infestations declined greatly in sorghum in Washington, Republic, Cloud, Dickinson, Marion, Geary, Chase, Lyon, Osage, Johnson, Riley, Marshall, and Nemaha Counties and all counties in southwest district. Decreases primarily due to parasitism by Lysiphlebus testaceipes (a braconid wasp) and to some degree by predation of lady beetles, and possibly due partially to effects of high winds, beating rains, and hail in some eastern counties. Recent buildups in sorghum reported in Butler, Cowley, Chautauqua, and Sumner Counties. Infestations up to 1,000 per plant reported, with averages ranging 400-500 per plant. Parasitism by L. testaceipes substantially increased recently in area and hopefully will have greenbug under control soon. (Bell). SOUTH DAKOTA - Very heavy in many sorghum fields in all areas where crop grown in State. Spraying underway for some time. Some problems with control reported. (Walgenbach et al.).

POTATO LEAFHOPPER (Empoasca fabae) - WISCONSIN - Counts light, 1-8 adults per 25 sweeps, on beans in central, southern, and east-central areas; averaged one nymph per leaf in one Sheboygan County field. Averaged less than one leafhopper per sweep on potatoes in central area. Generally ranged 1-3 per sweep of soybeans in central and south-central districts. Most fields have good set and fill progressing well. Moderate on 70 percent of apple trees near Spooner, Washburn County; will cause some leaf curling on young trees. (Wis. Ins. Sur.). INDIANA - Average counts per 10 sweeps of alfalfa by district as follows: Northwest, adults 11, immatures 6; north-central, adults 9, immatures 5; northeast, adults 13, immatures 23; southwest, adults 10, immatures 0.3; south-central, adults 7, immatures 2. In few fields where counts heavy in northern districts damage severe due to combination of E. fabae and low moisture. Little evidence of damage in any of southern districts where rainfall more prevalent. (Ballard, Meyer). KENTUCKY - Ranged 200-400 per 100 sweeps in northeastern area alfalfa. Some yellowing of lower leaves noted but most alfalfa in good condition. Leafhoppers averaged 250 per 100 sweeps at one Fayette County location. (Barnett).

SPOTTED ALFALFA APHID (Therioaphis maculata) - KANSAS - Ranged 10-20 per 10 sweeps in alfalfa in Riley, Washington, and Douglas Counties. (Bell).

TOBACCO BUDWORM (Heliothis virescens) - TENNESSEE - Based on 10-percent plant sample, percent damaged tobacco plants per acre ranged 0.6-4 in 5 fields totalling 8.8 acres in Trousdale County. (Gregory). KENTUCKY - Damaged 3 percent of tobacco plants in late-planted Mason County field. (Barnett). NEW JERSEY - Larvae infested many types of bedding plants. Heavy on petunias, snap-dragons, and geraniums. Larvae chew or bore into flower buds preventing normal bloom. (Ins.-Dis. Newsltr.).

CORN, SORGHUM, SUGARCANE

EUROPEAN CORN BORER (Ostrinia nubilalis) - WISCONSIN - Blacklight trap catches indicate moth activity heavy except in eastern and northeastern counties where development behind other areas. Egg masses found on sweet corn in Dane, Columbia, Green Lake, Fond du Lac, and Dodge Counties, but no more than 5 percent of plants with eggs in fields surveyed. Probable that egg masses will increase next 7 days since moths have had time to mate and develop eggs since heavy emergence of last period. Many pupae still in corn in central counties indicates continuing flight. In east-central area, no egg masses found on sweet corn in Kewaunee, Manitowoc, Sheboygan, or Ozaukee Counties. First-generation larvae in third or fourth instar in few fields with detectable populations. Much sweet corn surveyed well developed; much will be harvested next 21 days. Apparently there will be relatively few problems in sweet corn this season, although very late fields will be very susceptible to infestation. (Wis. Ins. Sur.).

MINNESOTA - Late-instar European corn borer larvae still found in west-central and northwest district corn. Moth emergence about complete in other districts. Indications are second generation will not be much heavier than first gemeration. (Minn. Pest Rpt.). MARYLAND - Moth flight continued light. Infestation levels in Eastern Shore field corn ranged 10-40 percent with most borers in third and fourth instars. Younger borers appeared more abundant in ear tips. (U. Md., Ent. Dept.). NEW YORK - Heavy moth flights noted in Geneva area, Ontario County. Field observations indicate only small number of eggs laid in corn in spite of heavy moth populations. (Davis). MAINE - Damage to corn evident statewide. Populations light in most areas but heavy in Winslow area of Kennebec County. Treatment minimized damage in several fields from Orono, Penobscot County, to Lewiston, Androscoggin County. Spotty heavy damage noted where inadequate treatments applied. (Gall).

FALL ARMYWORM (Spodoptera frugiperda) - KANSAS - Half to full-grown larvae infested 30 percent of preboot sorghum whorls in Geary County. (Bell). OKLAHOMA - Averaged 55 percent of plants infested in young sorghum in Caddo and Washita Counties, 30 percent in Osage County; heavy in Stephens County. (Okla. Coop. Sur.). MISSISSIPPI - Continued to damage late corn and sorghum in southern area. In young sorghum and corn in Grenada, Pontotoc, and Noxubee Counties, damaged plants ranged 10-60 percent. (Robinson). ALABAMA - Larvae ranged 2-4 per stalk in 100-acre volunteer cornfield in Coffee County. About 15 percent of young grain sorghum in 100-acre field in Geneva County infested. (Reynolds et al.). KENTUCKY - Heavy larval populations in Carlisle and McCracken Counties damaged grain sorghum. (Barnett, Raney).

WESTERN CORN ROOTWORM (Diabrotica virgifera) - UTAH - Adult damage to corn of concern to many growers in infested parts of northern area. (Knowlton). Damage conspicious in West Jordan area, Salt Lake County. (Burningham). COLORADO - Adults ranged 3-6 per plant in cornfields of Mesa County. (Bulla). MICHIGAN - Adults collected on field corn in Section 14 of Day Township and Section 9 of Sidney Township in Montcalm County August 12, 1974, by K. Sowerby. Determined by R.J. Sauer. This is a new county record. (Sauer). INDIANA - Adults collected in Howard County August 20, 1974, and in Wells, Madison, and Blackford Counties August 22, 1974, by T. Stiles; collected in Tipton County August 20, 1974, and in Warren and Grant Counties August 22, 1974, by T. Peck. Determined by T. Turpin. These are new county records. (Turpin).

NORTHERN CORN ROOTWORM (Diabrotica longicornis) - KENTUCKY - Extremely heavy adult populations feeding on corn silks caused reduced pollination at one Shelby County location. Adults averaged 15 per ear. (Barnett, Gregory).

CORN ROOTWORMS (Diabrotica spp.) - MINNESOTA - Annual survey nearing completion. Results showed increases in southeast, east-central, and central districts over 1973. Increases about 10 percent in southeast and east-central districts. Increase slightly more than double that of 1973 in central district. Lodging of corn increased significantly in these 3 districts. (Minn. Pest Rpt.). WISCONSIN - Annual adult survey underway; appears adult counts relatively light, although notable exceptions observed. In Walworth County, heavily infested field averaged about 8 per plant and silks clipped off on most plants, although pollination already occurred. In this field, D. longicornis (northern corn rootworm) outnumbered D. virgifera (western corn rootworm) 3 to 1. Lodging ranged up to 50 percent in margins of this field. Some fields in Green, Rock, Manitowoc, Kewaunee, and Sheboygan Counties with 2-3 adults per silk and in few cases silks still quite green. (Wis. Ins. Sur.).

BANKS GRASS MITE (Oligonychus pratensis) - TEXAS - Infestations in grain sorghum declined to noneconomic levels in counties in San Angelo area. Populations continued to increase in most fields in Reeves and Pecos Counties. Treatments applied to isolated fields with results being at best 40-50 percent population reduction. Surveys and reports from across High Plains counties near Lubbock indicate cool, wet weather depressed mite activity significantly. Spider mites continued to be held in check by mositure and cool temperatures in Hale County. (McWhorter et al.). OKLAHOMA - Continued to infest untreated corn in Texas County but did not increase due to cool weather and rain. (Okla. Coop. Sur.). NEBRASKA - One of 10 irrigated cornfields examined in Cherry County showed damage by O. pratensis and Tetranychus spp., with 2-3 dead leaves per plant. (Campbell).

SMALL GRAINS

WESTERN WHEAT APHID (Brachycolus tritici) - OKLAHOMA - Moderate on wheat near Sentinel, Washita County. Collected May 16, 1974, by E. Cleveland. Determined by L.M. Russell. This is a new State record. (Okla. Coop. Sur.).

TURF, PASTURES, RANGELAND

RANGE CATERPILLAR (Hemileuca oliviae) - NEW MEXICO - Adult surveys in Rio Arriba, San Juan, and Taos Counties revealed light counts and no heavy infestations. (N.M. Coop. Rpt.).

FALL ARMYWORM (Spodoptera frugiperda) - MISSISSIPPI - Active in pastures in southern area. Infestation levels not as severe as in 1973. (Robinson).

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - NEW MEXICO - Adults ranged 1-8 and larvae 4-43 per 25 sweeps of alfalfa at Albuquerque, Bernalillo County; larvae ranged 5-7 per 25 sweeps in Valencia County. (N.M. Coop. Rpt.). KANSAS - Larvae averaged 4 and adults 2 per 10 sweeps in 18-inch alfalfa in Riley County. Adults averaged 0.5 per 10 sweeps in one Washington County field. No larvae or adults noted in second field in Riley County nor in one field in Douglas County. (Bell). WISCONSIN - Larvae still found in some alfalfa; averaged about one per 10 sweeps in Adams County field. (Wis. Ins. Sur.). KENTUCKY - Larvae averaged 30 per 100 sweeps in Mason County alfalfa. Noticeable damage evident in Fayette County. (Barnett).

BLACK BLISTER BEETLE (Epicauta pennsylvanica) - NORTH DAKOTA - Ranged up to 350 per 100 sweeps on alfalfa in parts of Emmons, Kidder, Logan, and McIntosh Counties. Flowers severely chewed, prevented seed boll formation. (Kaatz).

ALFALFA CATERPILLAR (Colias eurytheme) - NEW MEXICO - Adults numerous in some alfalfa in Chaves County. Larvae ranged 1-6 per 25 sweeps in Chaves County and 1-8 at Albuquerque, Bernalillo County. (N.M. Coop. Rpt.).

WESTERN YELLOWSTRIPED ARMYWORM (Spodoptera praefica) - CALIFORNIA - Larvae of S. praefica, S. exigua (beet armyworm), and Colias eurytheme (alfalfa caterpillar) have been heavy in alfalfa-growing areas in lower San Joaquin Valley; treatment extensive. Larval populations now decreasing. C. eurytheme adult flights heavy, affecting traffic flow on highways in some areas of Kern County. (Cal. Coop. Rpt.).

MEADOW SPITTLEBUG (Philaenus spumarius) - INDIANA - Adults per 10 sweeps in forage legumes averaged as follows by county: Dubois, 12 in 4 fields; Harrison, 10 on 4 farms; Washington, 23 in 5 fields; Jackson 3 in 6 fields. (Meyer).

GUAR MIDGE (Cecidomyia texana) - TEXAS - Infestations reported from guar fields in Cottle, Hardeman, Haskell, Knox, and Wilbarger Counties. (Boring).

REDLEGGED GRASSHOPPER (Melanoplus femurrubrum) - WISCONSIN - Few adults present in most alfalfa, but most still in third and fourth instars. Counts still light except in field margins where counts heavy. (Wis. Ins. Sur.).

MEXICAN BEAN BEETLE (Epilachna varivestis) - MARYLAND - Egg laying continued in all areas of Eastern Shore. However, populations appear light and only one field in 20 hosts moderate level. Second-generation peak somewhat retarded and not expected until mid-September. Pediobius foveolatus (a eulophid wasp), a parasite of E. varivestis, appears well established in all Eastern Shore and southern areas. These wasps expected to spread and increase until frost. Heaviest parasitism rates appear to be in 10 to 20-percent range in isolated areas of Talbot, Dorchester, and Wicomico Counties. (U. Md., Ent. Dept.). VIRGINIA - E. varivestis adults averaged 3.9 per 30 row feet in sample of 30 fields (total of 670 acres) in Westmoreland County; defoliation averaged 5 percent. Adults averaged 5.6 per 30 row feet in 28 fields (666.5 acres) in Isle of Wight County; defoliation averaged 5 percent. No economic infestations found. (Allen). ALABAMA - Adults and larvae destroyed 60+ percent of foliage in 8-acre field at New Market, Madison County. Controls applied. (Gray).

BEAN LEAF BEETLE (Cerotoma trifurcata) - MISSISSIPPI - Adults averaged 20 per 100 sweeps in soybeans in Monroe and Clay Counties. In Leflore, Sunflower, Washington, and Bolivar Counties, only occasional beetle found. (Robinson).

THREECORNERED ALFALFA HOPPER (Spissistilus festinus) - OKLAHOMA - Ranged moderate to heavy in soybeans in Wagoner, Muskogee, Le Flore, and McCurtain Counties. Some fields averaged up to 10 lodged plants per 13 row feet. Adults averaged 4 per row foot in Okfuskee County, less than one in McIntosh County. (Okla. Coop. Sur.). MISSISSIPPI - In 200 acres of blooming soybeans in Bolivar County, 24 adults collected per 50 sweeps. (Robinson). ALABAMA - Damaged several hundred acres of late soybeans in Green County. (Foreman).

GREEN CLOVERWORM (Plathypena scabra) - MARYLAND - Larvae ranged 1-5 per yard of row in Dorchester, Caroline, and Wicomico Counties. Damage appears very light and well below 1973 levels for this period. (U. Md., Ent. Dept.). KENTUCKY - Larval averages in soybeans per row foot by county: Graves 4, Henderson 3, Ohio 6, and Caldwell 7.5. (Barnett, Roney). ILLINOIS - Averaged 2 per row foot in Piatt and De Witt Counties. No economic damage seen in any fields. (Ill. Ins. Rpt.). OKLAHOMA - Ranged moderate to heavy in soybeans in Wagoner, Muskogee, McCurtain, and Le Flore Counties. Averaged 2 per row foot in Okfuskee County, less than one per row foot in McIntosh County. (Okla. Coop. Sur.). MISSISSIPPI - In Monroe and Clay Counties, larvae of various instars averaged 58 per 100 sweeps; these are "hill" counties. In delta area counties of Leflore, Sunflower, Washington, and Bolivar, no larvae recovered from sampling of 5 fields in each county. (Robinson).

VELVETBEAN CATERPILLAR (Anticarsia gemmatalis) - GEORGIA - Ranged light to heavy in many fields in Brooks, Dougherty, Lanier, and Telfair Counties. Treatments applied. (Carr et al.). ALABAMA - First larvae of season light in several Geneva County fields and all fields examined in Mobile County; none observed in Escambia County. (Henderson et al.).

CABBAGE LOOPER (Trichoplusia ni) - OKLAHOMA - Ranged moderate to heavy in soybeans checked in Wagoner, Muskogee, Le Flore, and McCurtain Counties. Light in Okfuskee County. (Okla. Coop. Sur.).

SOYBEAN LOOPER (Pseudoplusia includens) - OKLAHOMA - Ranged moderate to heavy in soybeans checked in Wagoner, Muskogee, Le Flore, and McCurtain Counties. (Okla. Coop. Sur.).

PEANUTS

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - GEORGIA - Ranged light to heavy across peanut belt (French); moderate on Dodge County peanuts (Pittman, Rogers). OKLAHOMA - Infestations increased to 35 percent in peanuts checked in Marshall County. Averaged 15 percent in irrigated fields checked in Hughes County, decrease from previous period. (Okla. Coop. Sur.).

REDNECKED PEANUTWORM (Stegasta bosqueella) - OKLAHOMA - Infested terminals averaged 50 percent in dryland peanuts in Washita and Caddo Counties, ranged up to 50 percent in few fields in Marshall County. (Okla. Coop. Sur.).

GRANULATE CUTWORM (Feltia subterranea) - GEORGIA - Ranged light to heavy across peanut belt. (French).

VELVETBEAN CATERPILLAR (Anticarsia gemmatalis) - GEORGIA - Ranged light to moderate in southern part of peanut belt. (French).

THREECORNERED ALFALFA HOPPER (Spissistilus festinus) - GEORGIA - Ranged light to heavy across peanut belt, stem girdling common in some fields. (French).

TWOSPOTTED SPIDER MITE (Tetranychus urticae) - ALABAMA - Heavy and damaged several hundred acres in several fields in Geneva and Houston Counties. (Reynolds et al.). SOUTH CAROLINA - Due to heavy rains, potential threat of widespread damage to peanuts in Northampton, Halfiax, Chowan, and Hertford Counties greatly reduced. Light populations remain in many fields. (Hunt).

COTTON

BOLLWORMS (Heliothis spp.) - ARIZONA - Required treatment in field of short-staple cotton at Marana, Pima County. (Ariz. Coop. Sur.). NEW MEXICO - H. zea (bollworm) light in Eddy, Chaves, Dona Ana, and Sierra Counties. (N.M. Coop. Rpt.). OKLAHOMA - In Jackson, Greer, Tillman, Kiowa, and Harmon Counties Heliothis spp. eggs ranged 9-38 per 100 terminals, larvae 9-55, and damaged squares 10-20 percent. Damaged squares averaged 30 percent in Caddo and Washita Counties, heavy in some Stephens County fields. In Wagoner, Muskogee, and McCurtain Counties, eggs ranged 0-22 per 100 terminals, larvae 0-12, and damaged squares 0-20 percent. Larvae averaged about 25 percent H. virescens (tobacco budworm) in these 3 counties. (Okla. Coop. Sur.).

TEXAS - Cotton harvest suspended at several locations in Uvalde area by recent rains. Fields still green and squaring attractive to Heliothis zea and H. virescens moths and increased oviposition noted. Damaging H. virescens populations found near Uvalde. Heavy pressure from H. zea and H. virescens noted in most south-central counties. Almost all larvae collected during past 7 days were H. virescens. Oviposition decreased significantly past 4-5 days. H. zea infestations evident in Tom Green, Runnels, and Schleicher Counties. Some fields in area with 10-15 percent square damage. H. zea caused moderate damage to cotton in some fields in Hardeman, Knox, Stonewall, and Wilbarger Counties. Heaviest populations noted in irrigated fields. H. zea caused 5-20 percent square damage in these fields. In one Knox County field, Heliothis spp. damaged 50 percent of squares and caused heavy boll damage. H. zea eggs declined sharply in Trans-Pecos area. Eggs in isolated fields ranged 0-15 per 100 plant terminals in Pecos, Reeves, Glasscock, Reagan, Upton, Martin, and El Paso Counties. Larvae ranged 0-5 per 100 plant terminals with damaged squares ranging 4-20 percent. H. virescens increased in most fields. In one isolated field in Pecos Valley, H. virescens made up 50-60 percent of total Heliothis spp. complex. Occasional reports of light H. zea activity also noted in High Plains counties in Lubbock area. (Stewart et al.).

LOUISIANA - H. zea and H. virescens egg laying increased greatly week ending August 19. Up to 350 eggs per 100 plant terminals found in some fields. General increase in egg laying appears apparent over State. Should continue next 7 days; increase in live larvae should be obvious. H. virescens larvae increased in cotton as mid-August passed. (Tynes). LOUISIANA - Percent of fields with 5+ percent (economic threshold) squares damaged by Heliothis spp. as follows: 13 of 70 fields in St. Martin Parish; 16 of 80 fields in Catahoula Parish; 24 of 79 fields in Bossier Parish; zero of 36 fields in St. Landry Parish; and 21 of 147 fields in Rapides Parish. H. virescens continued dominant in fields checked. Control applications continued. (St. Cloud, Coburn). MISSISSIPPI - Heliothis spp. egg counts increased over State. Control generally good, few larvae escaped treatment. In Noxubee County, cotton in some fields averaged 70-100 percent eggs for 10-day period; however, reduction in eggs currently noted. (Robinson).

GEORGIA - H. zea damaged two percent of cotton squares in Clarke County; moderate to heavy in southern and eastern areas. (Roper, Boone). TENNESSEE - Heliothis spp. infested 0-4 percent of bolls in fields surveyed in Lincoln and Fayette Counties. (Cagle). In those fields surveyed in Henderson County, counts still below control level. In McNairy County infested fields, damaged squares ranged 1-5 percent. (Gordon).

BOLL WEEVIL (Anthonomus grandis) - TENNESSEE - In central area, punctured squares ranged 3-33 percent in fields surveyed in Franklin and Lincoln Counties; infested 0-3 percent of terminals. (Cagle). In fields surveyed in Henderson County, punctured squares ranged 20-94 percent. Counts heavy in fields where controls not maintained. Increased in treated fields. In McNairy County, punctured squares ranged up to 50 percent in fields surveyed. Weather continued ideal for further increases in weevil damage in rank fruiting cotton. Hill-land cotton continued to "cut out"

and weevils migrated from fields. (Gordon). GEORGIA - Punctured squares ranged up to 90 percent in Clarke County. (Roper). Light to moderate in southern area. (Boone). ALABAMA - Anthonomus grandis light in most fields in southern and central areas, controls effective. Population "explosion" underway in several thousand acres of cotton in mountain area in northern district. Controls underway. (Smith et al.).

LOUISIANA - Boll weevil still problem in many fields as of August 19. (Tynes). Currently at economic threshold in 33 percent of 70 fields checked in St. Martin Parish; 55 percent of 80 fields checked in Catahoula Parish; zero percent in 79 fields in Bossier Parish; 50 percent in 36 fields in St. Landry Parish; and 5 percent in 147 fields in Rapides Parish. Control applications continued. (St. Cloud, Coburn). ARKANSAS - Infestations continued to increase in most areas of State. Treatments effective. (Boyer). OKLAHOMA - Percent punctured squares by county: Ranged up to 84 in Jackson, up to 54 in Tillman, up to 43 in Greer, up to 24 in Kiowa, up to 7 in Harmon, up to 34 in Washita and Caddo, 25-70 in Stephens, light to heavy in Garvin, 2-20 in Muskogee, 10-20 in Wagoner, and 2-14 in McCurtain. Adults ranged up to 8 per bloom in Stephens County; 65 taken in 32 pheromone traps in Muskogee County. (Okla. Coop. Sur.).

TEXAS - Boll weevil infestations heavy in south-central counties. Dissections show 30-40 percent of some field collections now in diapause in these counties. Sixty to 80 percent of some collections from south-central counties showing indications of disease and may indicate large reduction in overwintering population. Light to moderate activity noted in most Rolling Plains counties. Activity reduced due to hot, dry weather conditions which prevailed during growing season. Weevils heavy in some fields in Hardeman, Knox, Stonewall, and Wilbarger Counties. In more heavily infested fields, square damage ranged 40-80 percent. Populations still variable in most fields in San Angelo area; 5-10 percent square damage common. One field with 50 percent square danage noted in Tom Green County. In general, populations down considerably from 1973. (Cole et al.).

TARNISHED PLANT BUG (Lygus lineolaris) - ARKANSAS - This species and Neurocolpus nubilis (clouded plant bug) continued of concern in untreated fields in northeast area. In Mississippi County, number of fields with infestations at treatment level increased to 5.3 percent from 3.4 percent last period. (Stevenson). Untreated fields in east and northeast areas will be watched carefully next few weeks for damage to small bolls. (Boyer).

LYGUS BUGS (Lygus spp.) - NEW MEXICO - Counts of 8-12 per 25 sweeps common in Hagerman and Roswell area, Chaves County. Some heavier counts reported in Artesia area, Eddy County. Damage evident on cotton from Vado south to Anapra in Dona Ana County. (N.M. Coop. Rpt.). TEXAS - Moderate to heavy in isolated cotton fields in Reeves and Pecos Counties. (Neeb).

BANDEDWING WHITEFLY (Trialeurodes abutilonea) - ALABAMA - Continued problem in several thousand acres of cotton over State. (Smith et al.). MISSISSIPPI - Infestations heavier in hill area cotton where several heavy control applications made. (Robinson). ARKANSAS - Infestations increased to economic level and several fields treated in southeast area. (Barnes).

TWOSPOTTED SPIDER MITE (Tetranychus urticae) - CALIFORNIA - This species and other spider mites have been heavier than for many years. Weather and treatments for other pests probably responsible for extended season and need for mite controls. Spider mites still infesting cotton, some controls still being applied. (Cal. Coop. Rpt.).

TOBACCO

TOBACCO FLEA BEETLE (Epitrix hirtipennis) - KENTUCKY - Adults averaged 3.8 per tobacco leaf at several Mason County locations and 2.9 per leaf at one Bourbon County location. About 70 percent of burley topped. Some early cutting completed in western and northeastern areas. (Barnett).

POTATOES, TOMATOES, PEPPERS

VARIEGATED CUTWORM (Peridroma saucia) - INDIANA - Larvae of this species and light numbers of 3 other noctuid moths defoliated or severely damaged plants and damaged some shallow tubers in about 200 of 500 acres of potatoes in St. Joseph County. Larvae averaged 25 per square foot in infested areas. Fields were treated once every 7 days. (Sillings).

TOMATO PINWORM (Keiferia lycopersicella) - OKLAHOMA - Moderate to heavy on commercial field-grown tomatoes in Tulsa County. Infestations mostly in greenhouses past several years. (Okla. Coop. Sur.).

EUROPEAN CORN BORER (Ostrinia nubilalis) - DELAWARE - Infestations in untreated peppers averaged 20 percent in northwestern Sussex County. Adults in blacklight trap collections ranged 10-20 per night in area. (Burbutis).

COLORADO POTATO BEETLE (Leptinotarsa decemlineata) - WISCONSIN - Larvae ranged 2-4 per stalk in large Waupaca County potato field; ranged up to three-quarters grown, with all instars present. Damage currently minimal, but will increase if controls not applied. (Wis. Ins. Sur.).

GENERAL VEGETABLES

EUROPEAN CORN BORER (Ostrinia nubilalis) - WISCONSIN - Strict preventive measures underway in most of central area to avoid possible damage. Blacklight trap catches remained heavy in central area; heavy increase observed in Columbia, Jefferson, and northwest Dodge Counties. Fresh egg masses found on Waushara County beans August 13; peak egg laying will occur next 3-10 days from moths in flight last period and this period. Weather will be important in determining time span of egg laying and hatch. (Wis. Ins. Sur.).

GRANULATE CUTWORM (Feltia subterranea) - ALABAMA - Larvae damaged all of 1,000 acres of sweetpotatoes in Cullman County. Controls underway. (Spears).

HAWAII INSECT REPORT

New State Record - Single adult of a SPHINGID MOTH (Theretra nessus (Drury)) taken at light at Campbell Industrial Park on Oahu August 14, 1974. Determined by F. Howarth. Species known from India, Sri Lanka (Ceylon), Burma, Malaya, New Guinea, Japan, and Australia. Hosts include Pongamia glabra (Leguminosae), Barringtonia spp. (Myrtaceae), Convolvulus spp. (Convolvulaceae), Dioscorea spp. (Dioscoreaceae), and Amorphophallus spp. (Aroideae). (Howarth).

General Vegetables - Heavy infestation of POTATO TUBERWORM (Phthorimaea operculella) observed in 5 acres of potatoes at Mililani, Oahu. Damage heavy to foliage and growing tips. Larvae observed feeding at leaf axils. (Mau).

Fruits and Ornamentals - BLACK PARLATORIA SCALE (Parlatoria zizyphus) ranged light to moderate on citrus trees throughout Makaha, Oahu. Infested all but one of 60+ trees checked during current survey for orange spiny whitefly. (Leonhardt, Otagaki). Islandwide survey for ORANGE SPINY WHITEFLY (Aleurocanthus spiniferus) on Oahu progressing more rapidly than anticipated. After 4 days, more than half of 600 designated survey points completed. No new hosts found. New area of infestation found on roses in Makiki area, about 3.25 miles northwest of original infestation site. (Mau).

DECIDUOUS FRUITS AND NUTS

APPLE MAGGOT (Rhagoletis pomonella) - MINNESOTA - Adult emergence continued, growers should continue cover sprays. (Minn. Pest Rpt.).

TWOSPOTTED SPIDER MITE (Tetranychus urticae) - COLORADO - Still major problem in apple and pear orchards on Western Slope. Uncontrolled populations ranged 100-300 mites per leaf. (Bulla).

PECAN NUT CASEBEARER (Acrobasis caryae) - TEXAS - Continued to cause some damage to pecans in Rolling Plains and Trans-Pecos area. Light activity reported from Ector and Ward Counties. (Boring, Neeb).

PECAN WEEVIL (Curculio caryae) - GEORGIA - Emergence peaked August 21 in Peach County. Pecan nut drop noted. (Payne). OKLAHOMA - Heavy on pecans in Love and Payne Counties, moderate in Pontotoc and Garvin Counties, and light in Tillman County. (Okla. Coop. Sur.).

BLACKMARGINED APHID (Monellia costalis) - OKLAHOMA - Ranged up to 100 per leaf on pecan trees in Okfuskee County; heavy in Pontotoc, Love, and Comanche Counties, moderate in Tillman County, and light in Tulsa and McIntosh Counties. (Okla. Coop. Sur.).

YELLOW PECAN APHIDS (Monellia spp.) - TEXAS - Populations decreased in most locations in Uvalde area. Aphids throughout most south-central counties generally noneconomic except in isolated areas. In Brazos County, heavy populations noted on pecan trees at College Station. Populations ranged 30-50 per compound leaf on some trees. Heavy infestations also noted on pecan trees in Wichita, Wilbarger, and Young Counties. Light to heavy populations on pecan foliage reported from Pecos and Ector Counties. Infestations light in Upton, Brewster, and Jeff Davis Counties. (Stewart et al.).

ORNAMENTALS

YELLOWSTRIPED ARMYWORM (Spodoptera ornithogalli) - OHIO - Late-instar larvae fed on tight buds of roses in Wayne County greenhouse. Plants infested with one or more larvae rendered unsaleable. This may be first recorded incidence of S. ornithogalli feeding on greenhouse roses in State. Determined by R.W. Rings. (Lindquist).

A SAWFLY (Nematus lipovskyi Smith) - NEW HAMPSHIRE - Four females collected from Azalea mollis at Durham, Strafford County, May 21, 1972, by J.G. Conklin. This is a new State record. (Blickle). For description of this new species by D.R. Smith and distribution see Proc. Ent. Soc. Wash. 76(2):204-207. (PPQ).

FOREST AND SHADE TREES

WHITE FIR NEEDLEMINER (Epinotia meritana) - CALIFORNIA - Complex of E. meritana, Choristoneura verdis, C. lambertiana (tortricid moths), and Dioryctria sp. (a pyralid moth) now occurs on 150,000 acres of forest lands in Modoc and Siskiyou Counties. Defoliation of firs and pines severe. Larval populations now subsided, moth flight complete. This is second year of infestation and complex is spreading. (Cal. Coop. Rpt.).

ELM LEAF BEETLE (Pyrrahalta luteola) - WEST VIRGINIA - Caused heavy damage to elms in Fayette County. (Moore). NEW MEXICO - Siberian elms in Valencia and Bernalillo Counties 75-95 percent defoliated. All instars present on remaining foliage. (N.M. Coop. Rpt.).

FALL WEBWORM (Hyphantria cunea) - MAINE - Webs noted on forest trees from Orono, Penobscot County, south to Androscoggin County enveloping 2 or 3 branches. Spot checks along highways indicate heavier infestation in southern counties. (Gall). SOUTH CAROLINA - Extensively damaged pecan, persimmon, sourwood, hickory, and cherry trees. Infestation along U.S. Highway 64 and Interstate Highway 40 noted at 1-10 webs per tree (average 3) on 50+ percent of persimmon trees (5+ feet tall) from Davidson County to McDowell County. Reports from Watauga and Avery Counties indicate much heavier infestation than in southwestern mountains. (Johnson et al.).

TULIPTREE APHID (Macrosiphum liriodendri) - CALIFORNIA - Collected from tuliptree (Liriodendron tulipifera) in San Leandro, Alameda County, July 3, 1974, by E. Whitaker. This is a new State record. Collected from tuliptree in San Jose, Santa Clara County, July 16, 1974, by Stegmiller and Ahrendes. This is a new county record. Determination by T. Kono. In San Jose, honeydew drip was heavy and leaf drop quite evident. (Cal. Coop. Rpt.).

AN APHID (Neoprociphilus aceris) - OKLAHOMA - Found heavy on limbs of maple tree in Minco, Grady County, June 10, 1974, by J. Igleheart. Determined by L.M. Russell. This is a new county record. (Okla. Coop. Sur.).

MAN AND ANIMALS

HORN FLY (Haematobia irritans) - MARYLAND - Counts in heaviest infested herds ranged 250-300 per head in Wicomico, Frederick, and Carroll Counties. Most herds hosted only moderate levels at this time. (U. Md., Ent. Dept.). TENNESSEE - Counts per head of cattle by county: Shelby 0-100, Tipton 0-75, Henry 10-50. (Swindol, Turpen). INDIANA - Averages ranged 20-25 per side on several lots of black cattle on experimental farm in Grant County. (Dobson). ILLINOIS - Averaged 195 per head on untreated beef cattle in De Witt County. (Ill. Ins. Rpt.). NEBRASKA - Averaged 150 per head where animals provided with backrubbers, 500+ per head where untreated in Cherry, Keith, Arthur, McPherson, Logan, and Lincoln Counties. (Campbell). KANSAS - Very heavy on some range cattle in Marion County; ranged 600-800 per head. (Bell). OKLAHOMA - Horn fly averaged 300 per head on cattle checked in Delaware and Adair Counties. Heavy in Craig, Garvin, and Comanche Counties. (Okla, Coop. Sur.). TEXAS - Heavy populations reported on livestock in Upton, Pecos, Reeves, and Ward Counties. Light to moderate populations reported on livestock in Brewster, Jeff Davis, Hudspeth, and Ector Counties. Infestations moderate to heavy in all San Angelo area counties. (Neeb. McWhorter). MISSISSIPPI - Averaged less than 200 per beef animal in Monroe and Chickasaw Counties. (Robinson).

FACE FLY (Musca autumnalis) - MARYLAND - Ranged 50-65 per head on dairy and beef cattle in heaviest infested herds in Howard, Montgomery, and Frederick Counties. Populations considered moderate to heavy statewide. (U. Md., Ent. Dept.). MISSISSIPPI - Populations

on cattle decreased from those of 14 days ago. Present levels in Monroe and Chickasaw Counties averaged 20 per head. Much eye watering and other eye problems noted in areas where activity heavy. (Robinson). INDIANA - M. autumnalis ranged 5-10 per face on several lots of black cattle on experimental farm in Grant County. (Dobson). ILLINOIS - Averaged 19 per head on untreated beef cattle in De Witt County. (Ill. Ins. Rpt.). WISCONSIN - Continued to be of concern to cattlemen, but populations moderate in most areas. Some carefully treated herds have little problem and others have severe annoyance. (Wis. Ins. Sur.). IOWA - Heavy on Story County cattle; ranged 2-60 (average 10) per head on untreated cattle. (DeWitt). UTAH - Annoyed dairy cattle in Richmond area, Cache County. (Knowlton).

STABLE FLY (Stomoxys calcitrans) - TENNESSEE - Heavy populations observed around barns and stables in western area; in most cases, controls warranted. (Gordon). ILLINOIS - Averaged 0.4 per head on untreated beef cattle in De Witt County. (Ill. Ins. Rpt.). WISCONSIN - Populations vary greatly over State. Heavy with severe annoyance to dairy cattle reported in Rock, Bayfield, and Calument Counties; annoyance light in Outagamie County. Caused much annoyance to humans, as well as cattle and deer in northern lake districts. Some fishermen report intense biting even in boats some distance from shore. (Wis. Ins. Sur.). NEBRASKA - Ranged 1-2 per leg and 8-10 per leg on animals confined in 2 Cherry County feedlots. (Campbell).

HOUSE FLY (Musca domestica) - TEXAS - Increasing populations noted throughout San Angelo and Trans-Pecos areas during past week. Heavy populations noted around livestock premises in Hudspeth County. (McWhorter, Neeb).

MOSQUITOES - MINNESOTA - Light-trap catches in Metroplitan Mosquito Control District began to show anticipated increases predicted on basis of early August rains. During period August 10-16, 1,261 females collected; Aedes vexans 64 percent, Coquillettidia perturbans 21 percent, balance contained 15 species. In evening bite collections, 73 percent A. vexans, 21 percent C. perturbrans. In daytime field bite collections, A. vexans 61 percent, A. stimulans 10 percent, A. triseriatus (a treehole breeder) 8 percent. A. vexans, A. triseriatus, Culex restuans, and A. cinereus, in that order, more important species in larval collections. (Minn. Pest Rpt.). WISCONSIN - Mosquitoes light in most areas. Few trouble spots still exist in Bayfield and Iron Counties in extreme northwest area. Specimens collected near Manitowish Waters, Vilas County, were Aedes vexans; however, counts light. (Wis. Ins. Sur.).

LONE STAR TICK (Amblyomma americanum) - TEXAS - Heavy nymphal populations found in brushy areas of most counties in San Angelo area. (McWhorter).

GULF COAST TICK (Amblyomma maculatum) - TEXAS - Infestations increased on livestock throughout most coastal counties in south-central area. (Cole).

BENEFICIAL INSECTS

LADY BEETLES - INDIANA - Adults averaged 1.28 per 10 sweeps in 21 alfalfa fields in southwest and south-central districts where counts made. About 58 percent Coleomegilla maculata, 33 percent Hippodamia parenthesis, 9 percent represented three species. (Meyer). OHIO - H. parenthesis adults appeared in alfalfa and red clover. Heaviest counts per 50 sweeps by county: Muskingum 10, Holmes 6, Coshocton 5, Guernsey 4. (Fox).

AN ICHNEUMON WASP (Bathyplectes curculionis) - IOWA - This larval parasite of Hypera postica (alfalfa weevil) reared from larvae collected in following counties: Cass, June 11; Crawford, June 12; Guthrie, June 13; and Shelby, June 12. Collected by G. Wallerich. Cerro Gordo, May 24; Dallas, May 20; Jasper, May 24; Madison, May 20; Polk, May 24; Van Buren, June 4; and Warren, May 1. Collected by C. Stottenow. Kossuth June 11 and Palo Alto June 13. Collected by C. Hammon. Lee County, May 1974, collected by S. Hintz and Davis County, May 11, collected by J. DeWitt. All determinations made by J. DeWitt. These are new county records. (DeWitt).

A CONIOPTERYGID (Aleuropteryx juniperi) - VIRGINIA - Heavy around juniper foundation planting near George Mason University at Independent City of Fairfax. Adults collected July 15, 1974, by R.W. Baumann. Determined by O.S. Flint. This is a new State record. (Flint). For first report of this neuripteron in United States see CEIR 24(33):659. (PPQ).

A CHALCID WASP (Brachymeria intermedia) - WEST VIRGINIA - About 11,000 adults released near Frankford, Greenbrier County, August 20, 1974. This is first release in county. (Coffman).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

GRASSHOPPERS - MINNESOTA - Additional adult surveys revealed economic populations in several districts. Last instar and adult Melanoplus femurrubrum averaged 63 per square yard in margins of one east-central area field. Ranged 18-27 per square yard in one Benton County alfalfa field in central area. In northwest district, high counts of 12 M. bivittatus adults and M. femurrubrum late instars per square yard found in Kittson County alfalfa fields. Most significant damage occurred in west-central district. M. bivittatus damaged edge rows in several Chippewa County cornfields. (Minn. Pest Rpt.). NORTH DAKOTA - Adult cropland survey showed M. bivattatus, M. packardii, and M. femurrubrum dominant in south-central counties. Economic infestations found in localized areas; counts ranged up to 9 per square yard in some fields, heavier in field margins. Small grains escaped serious damage, but boll cutting apparent in some flax fields. Alfalfa intended for seed damaged to where few seed bolls formed in some fields. (Kaatz). NEW MEXICO - Several species moved into alfalfa from ditches and field edges. Counts ranged 5-30 per 25 sweeps in some alfalfa in Bernalillo and Valencia Counties. (N.M. Coop. Rpt.). UTAH - Infestation much lighter in alfalfa adjoining range in Newton and Clarkston area of Cache County than at this time in 1973. (Knowlton).

JAPANESE BEETLE (Popillia japonica) - OHIO - Adults encountered in east-central area alfalfa. About one per 2 sweeps found in several Coshocton and Tuscarawas County fields. Occasionally, 4-5 per plant observed. (Fox).

PINK BOLLWORM (Pectinophora gossypiella) - TEXAS - Isolated cotton fields in Pecos County where no treatments applied hosted infestations ranging 3-50 percent. Boll infestations in treated fields ranged 0-6 percent. (Neeb). NEW MEXICO - Damage remained very light; no increase in activity in cotton-growing areas of State. (N.M. Coop. Rpt.). ARIZONA - Regular treatments in cotton continued in Salt River Valley, Maricopa County; spray schedules continued in Yuma County. Boll counts ranged 2-4 percent infestation; probably 2-3 more applications to be made. Infestation ranged 0-15 percent at Safford, Graham County. (Ariz. Coop. Sur.).

DETECTION

New State Records - A CONIOPTERYGID (Aleuropteryx juniperi) - VIRGINIA - Independent City of Fairfax. (p. 703). A SAWFLY (Nematus lipovsky) - NEW HAMPSHIRE - Strafford County. (p. 700). A SPHINGID MOTH (Thereta nessus) - HAWAII - Oahu Island (p. 699). TULIPTREE APHID (Macrosiphum liriodendri) - CALIFORNIA - Alameda County. (p. 701). WESTERN WHEAT APHID (Brachycolus tritici) - OKLAHOMA - Washita County. (p. 692).

New County Records - An APHID (Neoprociphilus aceris) OKLAHOMA - Grady (p. 701). An ICHNEUMON WASP (Bathyplectes curculionis) IOWA - Cass, Crawford, Guthrie, Shelby, Cerro Gordo, Dallas, Jasper, Madison, Polk, Van Buren, Warren, Kossuth, Palo Alto, Lee, Davis (p. 703). TULIPTREE APHID (Macrosiphum liriodendri) CALIFORNIA - Santa Clara (p. 701). WESTERN CORN ROOTWORM (Diabrotica virgifera) MICHIGAN - Montcalm (p. 692). INDIANA - Wells, Madison, Blackford, Tipton, Warren, Grant (p. 692).

CORRECTIONS

CEIR 24(33):655 - FLORIDA FERN CATERPILLAR (Callopistromyia floridensis) should read (Callopistria floridensis). This correction should also be made on page 661 under New State Records. (PPQ).

CEIR 24(34):665 - HIGHLIGHTS - DETECTION - Delete "... and 7 APHIDS in Vermont (p. 683)." These records not carried in this issue. (PPQ).

CEIR 24(34):681 - MOSQUITOES - OHIO - Aedes cantator should read Aedes sollicitans. (Fox).

LIGHT TRAP COLLECTIONS

	Temperature °F.	Precipitation (inches)	Type of trap (BL - blacklight; I - incandescent; MV - mercury vapor; O - other)	Agrotis ipsilon (black cutworm)	Estigmene acrea (salt marsh caterpillar)	Euxoa auxiliaris (army cutworm)	Faronta diffusa (wheat head armyworm)	Feltia subterranea (granulate cutworm)	Heliothis virescens (tobacco budworm)	H. zea (bollworm, corn earworm, tomato fruitworm)	Laspeyresia pomonella (codling moth)	Loxostege commixtalis (alfalfa webworm)	Loxostege rantalis (garden webworm)	Loxostege sticticalis (beet webworm)	Manduca quinquemaculata (tomato hornworm)	Manduca sexta (tobacco hornworm)	Ostrinia nubilalis (European corn borer)	Peridroma saucia (variegated cutworm)	Pseudaletia unipuncta (armyworm)	Spodoptera exigua (beet armyworm)	Spodoptera frugiperda (fall armyworm)	Spodoptera ornithogalli (yellow-striped armyworm)	Trichoplusia ni (cabbage looper)	Crops
ARIZONA																								
Mesa 8/12-18			BL	20		7			61						4		4		2260		141	289		
FLORIDA																								
Gainesville 8/16-21			BL					4	18						6			5	2	12	8			
ILLINOIS (County)																								
Ogle 8/13-19			BL						6							288		77		58				
INDIANA (Districts)																								
North West 8/9-15			BL	2												5		4						
West Central 8/9-15			2BL	31					1					1		28	3	23						
KANSAS																								
Manhattan 8/20			BL	6			30		30							3		2		1	1	2		
Scandia 8/20			BL	2			24		10							16		3				2		
KENTUCKY																								
Lexington 8/22-23			BL	5													10	33			10			
MINNESOTA																								
Fergus Falls 8/15-21			BL				234	12																
Worthington 8/15-21			BL				236																	
MISSISSIPPI																								
Stoneville 8/16-22	68-93	0.41	2BL	21				25	100	2710								24	22	70	232	882		
NEBRAKSA																								
Clay Center 8/19			BL											3		32	64	32						
Panhandle 8/22			BL	1			158							1				1						
NEW HAMPSHIRE																								
Lee 8/19			BL	8												1		2						
NEW JERSEY																								
Seabrook 8/14-20			7BL	41								16				3				5				
Vineland 8/14-20			7BL	93								14				9								

LIGHT TRAP COLLECTIONS

BL - blacklight
IV - incandescent
O - mercury vapor
other

	Temperature °F	Precipitation (inches)	Type of trap	Agrotis ipsilon (black cutworm)	Estigmene acrea (salt marsh caterpillar)	Euxoa auxiliaris (army cutworm)	Faronia diffusa (wheat head armyworm)	Feltia subterranea (granulate cutworm)	Heliothis virescens (tobacco budworm)	H. zea (bollworm, corn earworm, tomato fruitworm)	Laphygma frugiperda (fall armyworm)	Loxostege commixtalis (alfalfa webworm)	Loxostege rantalis (garden webworm)	Loxostege sticticalis (beet webworm)	Mamestra quinquemaculata (tomato hornworm)	Mandura sexta (tobacco hornworm)	Ostrinia nubilalis (European corn borer)	Pardrosa saucia (variegated cutworm)	Pseudaletia unipuncta (armyworm)	Spodoptera exigua (beet armyworm)	Spodoptera frugiperda (fall armyworm)	Spodoptera ornithogalli (yellow-striped armyworm)	Trichoplusia ni (cabbage looper)	Crops
NORTH DAKOTA																								
Bismarck 8/16-19			BL														5		1	67				
Fargo 8/18-22			BL																	1			8	
OHIO																								
Wooster 8/17-23			3BL	20											1		136	31	82			6	6	
PENNSYLVANIA (Districts)																								
Central 8/8-20			BL	12	10				2						6		63	1						
North East 8/8-20			BL												1									
TENNESSEE (Counties)																								
Hardeman 8/19-23			BL	2				2	12										11			21	1	
Madison 8/19-23			BL	13					9										9			10		
VIRGINIA																								
Blacksburg 8/16-22			BL	14					3						1		24		26					
Warsaw 8/16-22			BL	2					6						3		94		12					
WISCONSIN																								
Cedar Grove 8/13-20			BL														46		22					
Hancock 8/15-21			2BL														224		2					

Ischyroceraea Kiaer, A Sawfly Genus New for North America (Hymenoptera: Tenthredinidae)

David R. Smith 1/

Abstract: Ischyroceraea Kiaer and its only species, I. arctica (Thomson) n. comb., is recorded from North America based on specimens from Alaska. The genus and species have been known only from Eurasia. Eniscia Thomson, which was previously considered as the valid generic name, is shown to be a synonym of Sciapteryx Stephens.

The genus Ischyroceraea, represented by the single species I. arctica (Thomson), has been recorded only from Scandinavia and Siberia. Three specimens collected in Alaska also belong to this genus and species. This record is an addition to the growing list of holarctic sawflies.

The use of Ischyroceraea as the generic name is unfortunate but must be used in accordance with the rules of nomenclature as currently applied. Since Konow (1908) and Rohwer (1911b), Eniscia, with Eniscia arctica Thomson as type-species and Ischyroceraea Kiaer as a synonym, has been considered the valid generic name. Thomson (1870) included two species in Eniscia when he described the genus, E. consobrina (Klug) and E. arctica, n. sp., in that order. Konow (1908) removed consobrina and placed it in the genus Sciapteryx where it currently belongs thereby leaving arctica as the sole representative of Eniscia. However, Konow (1908) did not state that arctica was the type of the genus even though he left it as a monotypic genus and must have intended arctica to be so. Rohwer (1911a) designated Tenthredo consobrina Klug as type-species of Eniscia, but later (1911b) stated that he was wrong in considering consobrina as type-species because he overlooked Konow's 1908 paper. He changed his opinion on the basis that Konow's indication of the type of the genus by elimination served to fix the type-species and considered Konow (1908) as the type-designator. Rohwer acted in good faith in this change by following the recommendations of the rules of nomenclature as they were applied at that time. To this date, authors have followed Rohwer (1911b) and have used Eniscia with type-species E. arctica Thomson as designated by Konow, 1908.

According to the current International Code of Zoological Nomenclature, Konow did not designate the type-species because he did not specifically state that arctica was the type. The only valid type designation is consobrina by Rohwer, 1911a. By applying the current rules of nomenclature, the usage of Eniscia over the past 66 years must be changed: Eniscia with consobrina as type-species becomes a synonym of Sciapteryx, and Ischyroceraea becomes the valid generic name for the species arctica. In summary:

(1) Sciapteryx Stephens, 1835. Type-species: Tenthredo costalis Fabricius. Monotypic.

Eniscia Thomson, 1870. Type-species: Tenthredo consobrina Klug. Design. by Rohwer, 1911a. N. SYN.

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(2) Ischyroceraea Kiaer, 1896. Type-species: Ischyroceraea hyperborea Kiaer. Montypic.

Ischyroceraea arctica (Thomson). N. COMB. (=Ischyroceraea hyperborea Kiaer, synonym by Konow, 1908).

If arctica is to be considered as type-species of Eniscia, application would have to be submitted to the International Commission on Zoological Nomenclature to set aside Rohwer's (1911a) type-designation. I would support a case considering this because (1) I believe that arctica was originally intended to be the type of the genus, (2) Rohwer (1911b) acted according to the recommendations employed at that time, and (3) Eniscia has been used for nearly 70 years. In this instance, strict application of the current Code upsets rather than insures the stability of nomenclature. However, is it worth taking the time and effort of many people to make application for stabilization of a name that has not frequently appeared in the literature.

Ischyroceraea Kiaer

Ischyroceraea Kiaer, 1898. Tromsö Mus. Aarsh. 19:68: Konow, 1908. Ztschr. System. Hym. Dipt. 8:87 (=Eniscia Thomson). Type-species: Ischyroceraea hyperborea Kiaer. Monotypic.

This genus is related to Tenthredo and is most likely to be confused with those species of Tenthredo which have short, clubbed antennae and have black with yellow markings such as yellow transverse stripes on the abdomen. Ischyroceraea is distinguished from Tenthredo by the following: eyes small and far apart, distance between eyes more than one and one half times length of an eye; antenna stout, but not clubbed; extremely long malar space, nearly five times as great as diameter of front ocellus; and dull, densely punctured head, thorax, and abdomen.

Ischyroceraea arctica (Thomson) n. comb.

Eniscia arctica Thomson, 1870. Opusc. Entomol. 2:300; Konow, 1908. Ztschr. System. Hym. Dipt. 8:87; Malaise, 1931. Svenska Vet.-Akad. Skrift. Naturskydd. 17:55 (in Sweden); Malaise, 1932. Arkiv för Zool. 23A:4 (in Siberia).

Ischyroceraea hyperborea Kiaer, 1898. Tromsö Mus. Aarsh. 19:68; Konow, 1908. Ztschr. System. Hym. Dipt. 8:87 (=arctica Thomson).

Female: Length, 10.0 mm. Black with following yellow: clypeus, labrum, mandibles, paired transverse streaks on hind margin of tergites 3 to 7, center of 9th tergite, and outer surface on front femur except at extreme base. Each tibia and tarsus orange-yellow. Wings lightly, uniformly infuscated yellow; veins and stigma orange-yellow.

Head and thorax dull, rough, heavily punctured; abdomen dulled with surface sculpture, vaguely shining. Antenna stout, length about one and one-half times head width; first segment as long as broad; second segment broader than long; third segment twice length of fourth segment; fourth to ninth segments each less than twice as long as broad. Clypeus shallowly circularly emarginated; malar space extremely long, about 5 times longer than diameter of front ocellus or about one-third of eye length. Eyes small, slightly coverging below, distance between eyes below less than twice length of an eye. Each mandible quadridentate. Postocellar area broader than long; occipital carina distinct on entire hind margin of head; frontal crests about antennae absent. Tarsal claws with inner tooth, inner tooth shorter than outer tooth and not appressed to outer tooth. Cenchri much farther apart than breadth of one. Anal crossvein of forewing perpendicular, not slanted, and at center of anal cell. Sheath in lateral view straight above, rounded below; in dorsal view, uniformly slender. Lancet as in fig. 4.

Male: Length, 9.0 to 9.5 mm. Coloration similar to that of female except for abdomen which is entirely black or with very small paired yellow spots on tergites 3 to 7. Texture and structure similar to that of female. Genitalia as in Figs. 2 and 3.

Distribution: Norway; Sweden; Siberia; United States (Alaska, Umiat, 21-VI-47, C. Schultz). The three Alaskan specimens (1 female, 2 males) are in the U.S. National Museum.

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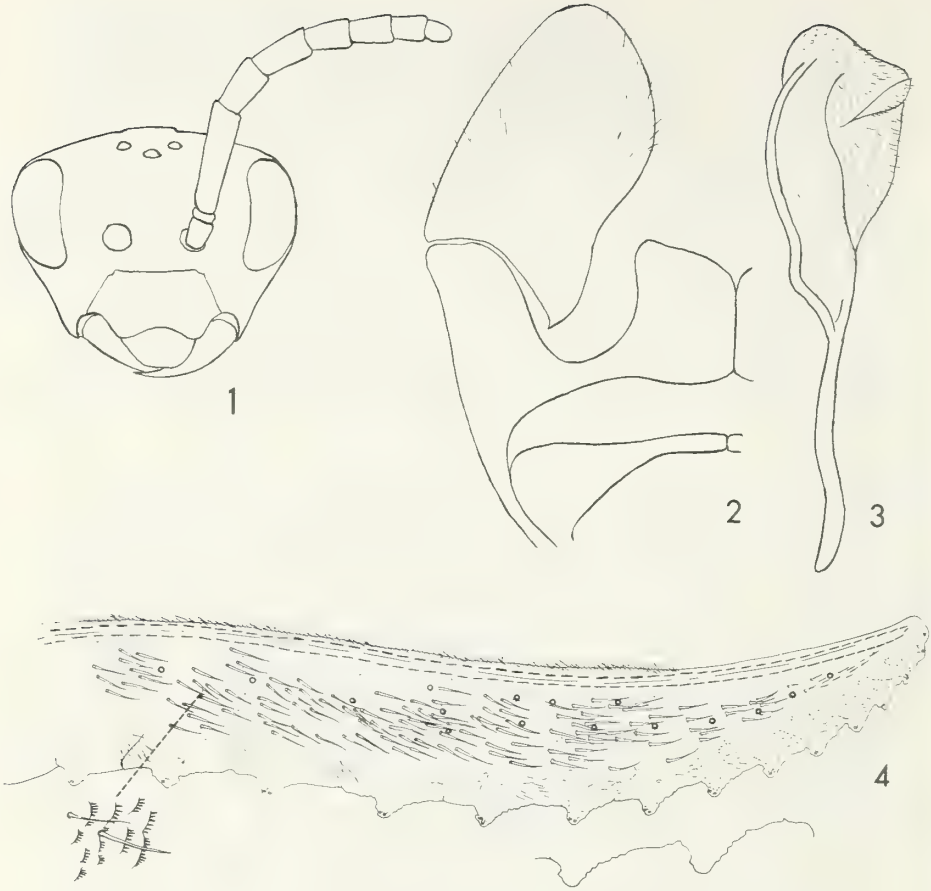

Figure Legends

Ischyroceraea arctica (Thomson). Fig. 1, head and antenna, front view; fig. 2, harpe and parapenis, male; fig. 3, penis valve, male; fig. 4, lancet, female, showing closeup of texture and two serrulae. Lancet drawn by Ann Lacey.

U.S. Dept. Agr.
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Records of a Few Vermont Aphids
(Homoptera: Aphididae)

Mortimer D. Leonard 1/

The following records are based on collections made by Philip R. Benedict of the University of Vermont during 1972. Of these, 7 represent new State records. These are indicated by an asterisk (*).

Aphis craccivora Koch (cowpea aphid). Addison, June 19 on Vicia sp., about 50 apterae and nymphs. Second record for Vermont.

* Aphis fabae Scopoli (bean aphid). Westhaven, June 27 on Arctium minus, about 30 apterae and nymphs.

* Aphis spiraericola Patch (spirea aphid). Thetford, July 31 on Spiraea sp., few apterae and nymphs.

* Cryptomyzus ribis (Linnaeus) (currant aphid). Waterbury, June 20 on currants, few apterae and nymphs.

Dactynotus pseudambrosiae (Olive). New Haven, June 29 on Cichorium intybus. Third record for Vermont.

Dactynotus sp. Bridport, June 28 on dandelion, about 20 apterae.

* Eriosoma americanum (Riley) (woolly elm aphid). Montpilier, July 5 on American elm, in curled leaves.

* Hyadaphis foeniculi (Passerini). Bridport, June 29 very abundant on Pastinaca sativa.

* Macrosiphum albifrons Essig. Waterbury, September 5 on Lupinus sp.

Macrosiphum euphorbiae (Thomas) (potato aphid). Montpilier, September 13 on Gladiolus sp., one alata, 15 apterae, and nymphs.

* Neoceruraphis viburnicola (Gillette) (snowball aphid). Waitsfield, July 3 several on snowball tree.

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Weather of the week continued from page 688.

A cold front trailing from the upper Great Lakes triggered thunderstorms from western Texas into the middle Mississippi Valley Thursday. Overnight thunderstorms left locally heavy rains of one to 3 inches from western Missouri into west-central Illinois. By 1 a.m. Friday, Lubbock, Texas, measured 2 inches of rain, the heaviest 24-hour rainfall in 2 years. Later in the day, thunderstorms occurred from southeastern New York and southwestern New England to the Middle Atlantic Coast States. Saturday, thundershowers continued from Kansas to eastern New Mexico and extreme western Texas. During late afternoon and evening on Sunday, thunderstorm activity persisted over much of New England into eastern Virginia.

TEMPERATURE: Mild weather dominated most of the Nation last week. Temperatures averaging 3 to 5 degrees above normal were reported in States surrounding the Great Lakes area eastward through New England. Elsewhere, temperatures 3 to 4 degrees above normal were recorded at Huron, South Dakota; Phoenix, Arizona; and San Francisco, California. Cooler areas of the country included west Texas and New Mexico where temeratures fell 3 to 6 degrees below normal and from Nevada to North Dakota where temperatures were 3 to 4 degrees below normal. Monday, most of the Nation reported early afternoon temperatures in the 70's and 80's east of the Mississippi River and in the 70's in the Plateau region on Tuesday. Meanwhile, the 60's and 70's prevailed along the Pacific coast. Wednesday morning low temperatures ranged from 20 degrees at Big Piney, Wyoming, to 87 degrees at Key West, Florida. By midday, the sun had warmed temperatures into the 90's over the southeastern Plains and the lower half of the Mississippi Valley. Under the clouds in the northern Plains midday readings were only in the 50's. On Thursday, behind a cold front from the southern Rockies to the upper Mississippi Valley the temperatures plummeted into the 60's and 70's while it was much warmer ahead of the front in Texas where the 90's were most common. Friday, afternoon temperatures ranged from 42 degrees at Grand Forks, North Dakota, to 90 degrees at Blythe and Needles, California. Binghamton, New York, established a new record for the date with a temperature of 85 degrees. On Saturday, most of the Nation recorded temperatures in the 70's and 80's. However, a few 90's were reported in the Gulf Coast States and in the Desert Southwest. Sunday afternoon temperatures around the Nation ranged from 103 degrees at Palm Springs, California, to 63 degrees at Arcata, California; Caribou, Maine; and Cut Bank, Montana.

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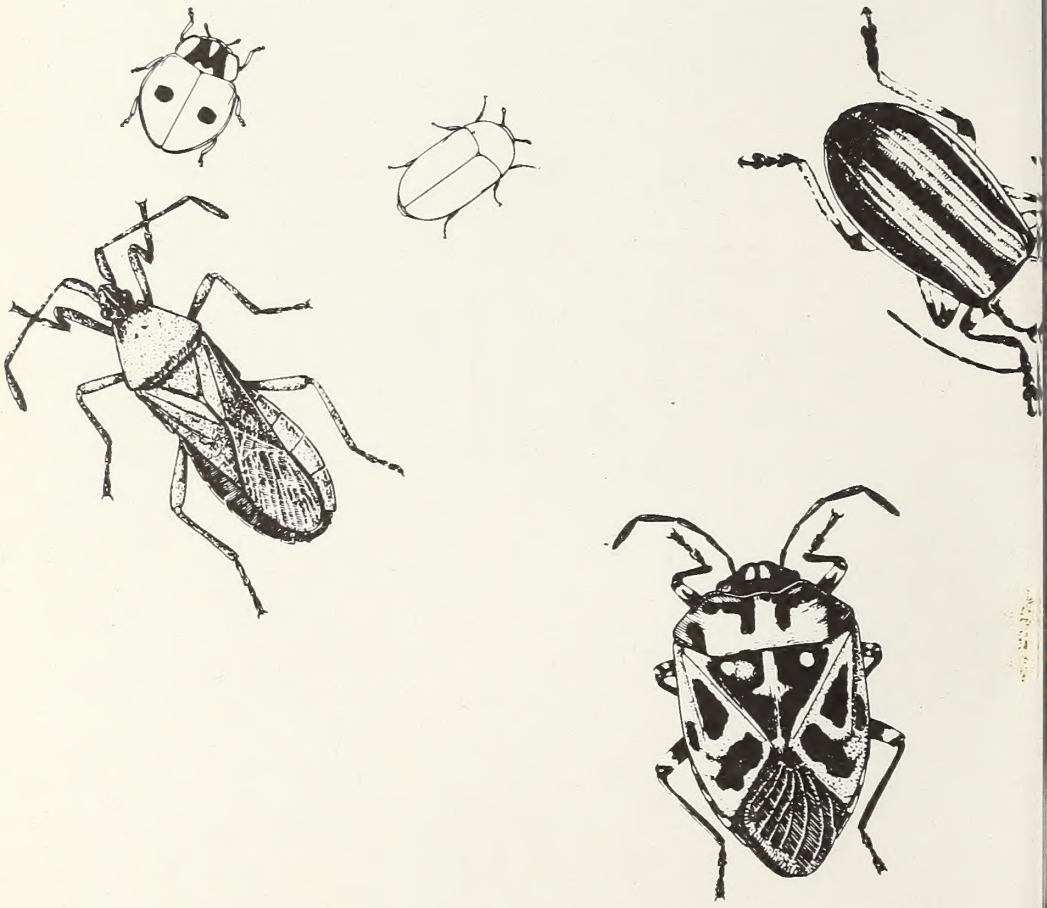
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